

7.2.1 Minimum Efficiency Standards for Appliances and Equipment

| | Adjusted Volume (2) (Cu. Ft.) | Rated Maximum Electricity Use (kWh) | | | | |
|---|---------------------------------------|--|------|--|-------------|-------------|
| | | 1990 | 1993 | 2001 | | |
| Refrigerator-Freezers (Auto Defrost) (1) | | | | | | |
| Top freezer w/o through-the-door ice service and all-refrigerators—auto defrost | 21 | 955 | 685 | 478 | | |
| Side freezer w/o through-the-door ice service | 25 | 1,183 | 797 | 631 | | |
| Bottom freezer w/o through-the-door ice service | 25 | 1,183 | 781 | 574 | | |
| Top freezer w/ through-the-door ice service | 18 | 1,015 | 711 | 542 | | |
| Side freezer w/ through-the-door ice service | 29 | 1,428 | 992 | 694 | | |
| Freezers (1) | | | | | | |
| | Adjusted Volume (2) (Cu. Ft.) | Rated Maximum Electricity Use (kWh) | | | | |
| | | 1990 | 1993 | 2001 | | |
| Upright Freezers w/ Manual Defrost | 25.7 | 702 | 529 | 452 | | |
| Upright Freezers w/ Automatic Defrost | 30.0 | 1,103 | 838 | 699 | | |
| Chest Freezers and all other Freezers except Compact Freezers | 24.8 | 590 | 433 | 389 | | |
| Room Air-Conditioners (3) | | | | | | |
| | Minimum EER | Typical Maximum Electricity Use (kWh) (4) | | | | |
| | | | | | | |
| Less than 6,000 Btu/h | 9.7 | 464 | | | | |
| 6,000 to 7,999 Btu/h | 9.7 | 541 | | | | |
| 8,000 to 13,999 Btu/h | 9.8 | 842 | | | | |
| 14,000 to 19,999 Btu/h | 9.7 | 1,314 | | | | |
| 20,000 Btu/h or more | 8.5 | 1,765 | | | | |
| Clothes Dryers (3) | | | | | | |
| | Minimum EF (lbs./kWh) | Typical Maximum Energy Use | | | | |
| | | | | | | |
| Electric, Standard | 3.01 | 835 kWh | | | | |
| Gas | 2.67 | 32 therms | | | | |
| Clothes Washers (3) | | | | | | |
| | Minimum EF (cu. Ft./kWh per cycle) | Minimum Modified EF (cu. Ft./kWh per cycle) | | Typical Maximum Electricity Use (kWh) (5) | | |
| | 1994 | 2004 | 2007 | | | |
| Top Loading, Standard | 1.18 | 1.04 | 1.26 | 1,265 | | |
| Horizontal-Axis | N.A. | 1.04 | 1.26 | 731 | | |
| Dishwashers (3) | | | | | | |
| | Minimum EF (cycles/kWh) | Typical Maximum Electricity Use (kWh) | | | | |
| | | | | | | |
| Standard Dishwasher | 0.46 | 498 | | | | |
| Water Heaters (6) | | | | | | |
| | Minimum EF (7) | | | Typical Maximum Energy Use | | |
| | 1990 | 1991 | 2004 | 1990 | 1991 | 2004 |
| Gas-Fired | 0.54 | 0.54 | 0.59 | 208 therms | 208 therms | 191 therms |
| Oil-Fired | 0.51 | 0.51 | 0.51 | 155 gallons | 155 gallons | 155 gallons |
| Electric Resistance | 0.90 | 0.88 | 0.92 | 3456 kWh | 3534 kWh | 3380 kWh |

Note(s): 1) DOE regulations mandate maximum electrical consumption for appliance based on its size. 2) AV = Adjusted Volume = Refrigerator Compartment + 1.63 * Freezer Compartment. 3) DOE regulations mandate minimum efficiency for appliance. 4) Electric use based on 750 hours of operation. 5) Includes electricity for water heater and clothes dryer. 6) DOE regulations mandate minimum efficiency for appliance based on its size. 7) Based on a 40-gallon tank.

Source(s): DOC/GPO, 2001 CFR, Title 10, Chapter 2, Part 430, Section 430.32, Jan. 1, 2001, p. 258-264 for minimum efficiencies; AHAM, 2000 Major Home Appliance Industry Factbook, Nov. 2000, Table 21, p. 28, for refrigerator and freezer sizes; DOE/EE, Final Rule Technical Support Document: Energy Efficiency Standards for Consumer Products: Clothes Washers, Dec. 2000, p. 10-8; LBNL, Energy Data Sourcebook for U.S. Residential Sector, May 1997, p. 102-103 for clothes dryers, p. 94 for dishwashers; DOE/EE, Technical Support Document: Energy Efficiency Standards for Consumer Products: Water Heaters, Apr. 2000, p. 9-14.